

10/579960

JAP20 Rec'd PCT/PTO 19 MAY 2006

What is claimed is:

1. (original) A method for producing a screw connection by means of a cutout screwdriver (10) that terminates a screw driving operation when a predetermined torque is achieved,
wherein data relating to an operation are detected in the cutout screwdriver (10) and transmitted to an external monitoring unit (20).
2. (original) The method as recited in claim 1,
wherein the data are detected and/or evaluated by means of an evaluation circuit (18) and transmitted to the monitoring unit (20), the monitoring unit (20) receives the transmitted data and evaluates them with regard to predetermined limit values, and, if limit values are not met, then an error message is generated.
3. (currently amended) The method as recited in claim 1 or 2,
wherein data relating to the operation are detected, and if a number of incorrect screw driving operations lies outside a tolerance range, then the cutout screwdriver (10) is deactivated.
4. (currently amended) The method as recited in ~~one of the preceding claims~~
claim 1, wherein a torque sensor (12) in the cutout screwdriver (10) detects a current torque and transmits it to the evaluation circuit (18).
5. (original) The method as recited in claim 4,
wherein the evaluation circuit (18), based on the achievement of a desired torque, determines whether a correct screw driving operation has been executed.
6. (currently amended) The method as recited in ~~one of the preceding claims~~
claim 1, wherein the evaluation circuit (18) detects the number of screw driving operations per screw driving cycle.

7. (currently amended) The method as recited in ~~one of the preceding claims~~
claim 1, wherein the evaluation circuit (18) detects the duration of the screw driving procedure.

8. (currently amended) The method as recited in ~~one of the preceding claims~~
claim 1, wherein the evaluation circuit (18) detects the current consumption and/or voltage drop during a screw driving operation.

9. (currently amended) The method as recited in ~~one of the preceding claims~~
claim 1, wherein limit values for the data transmitted from the evaluation circuit (18) are stored in the monitoring unit (20), with which the transmitted data are compared and evaluated, and when limit value criteria are not met, the monitoring unit (20) sends the cutout screwdriver (10) a signal that causes the supply of current to the cutout screwdriver (10) to be interrupted.

10. (currently amended) A device for executing a method as recited in ~~one of the preceding claims 1 through 9~~
claim 1, wherein a cutout screwdriver (10) is connected to an evaluation circuit (18) that is coupled to a monitoring unit (20).

11. (original) The method as recited in claim 10,
wherein the cutout screwdriver (10) has a transmitter/receiver system, which, in conjunction with a transmitted signal, is able to interrupt a supply of current to the cutout screwdriver (10).

12. (original) The method as recited in claim 10,
wherein the monitoring unit (20) has a transmitter/receiver system that is able to receive data transmitted from the evaluation circuit (18) and to send a deactivation signal to the cutout screwdriver (10).

13. (currently amended) The method as recited in ~~claims 11 and 12~~
claim 11,

wherein the monitoring unit (20) has an evaluation unit (22) in which the data transmitted from the evaluation circuit (18) are stored, compared with limit values for the transmitted data, and evaluated, and, when limit value criteria are not met, the evaluation unit sends the cutout screwdriver (10) a signal that permits a control unit (16) to interrupt the supply of current in the cutout screwdriver (16).

14. (currently amended) A cutout screwdriver equipped with a transmitter/receiver unit for executing the method as recited in ~~one of claims 1 through 9~~ claim 1.